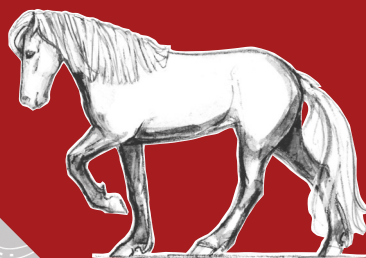
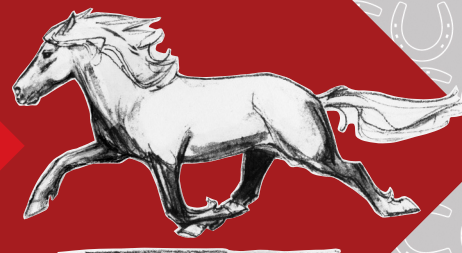
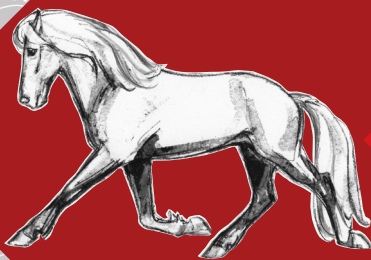
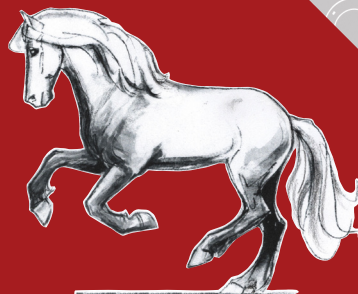


# The gaits of the Icelandic horse

BASIC DEFINITIONS







# Gaits of the Icelandic horse

When the FEIF conference in 2012 was held in Malmö Sweden, Sigurður Ævarsson and Sigurbjörn Bárðarson, representatives from the Iceland Equestrian Association (LH), offered that LH would manage the task of defining the gaits of the Icelandic horse, in accordance with the FEIF's Task Force project. This project included the revision of the rules and regulations of FEIF.

According to public figures, more than 11.000 people practice horsemanship in Iceland. The definitions of the gaits, that the Icelandic horse possesses, need to be accessible. They are one of the preconditions to fully understand the best way to train the horse and enabling it to gain mastery in each gait.

This work is also a basis for coordination in the assessment of horses in competition and at breeding field tests. Moreover, this work is important for the education and training of all persons judging Icelandic horses.

With this in mind, LH involved Sigurður Ævarsson, Sigurbjörn Bárðarson, dr. Þorvaldur Kristjánsson and Gunnar Reynisson, with Þorvaldur being the chairman of the committee.

The drawings are based on research from video clips on the dynamic process of the gaits.

With this ambitious project, LH would like to contribute to ensure Iceland's leadership within the Icelandic horse community as the country of origin. For this to happen it is important to take part in the good work within FEIF.

On behalf of LH, I would like to thank these individuals for their good and remarkable work, as you will see on the following pages. These definitions of the gaits of the Icelandic horse will be useful in the future in discussions regarding training, structure, horsemanship, education, judging and everything else that follows the Icelandic horse life.

*Haraldur Þórarinnsson,*  
Chairman of LH

# Definition of the gaits

The Icelandic horse is known for being a versatile, five-gaited horse with a good temperament, and used as a riding horse as well as in leisure riding, sport and breeding.

To be able to understand the characteristics and the qualities of the gaits, it is very important to have a clear and internationally accepted definition of the beat, footfall sequence and movements as the basis for the judges' evaluation in Breeding Shows, Gæðingakeppni, Sport and Youth competitions.

It is necessary for instructors and trainers at all levels to be fully familiar with the definitions and to use and refer to them in their education of horses and riders.

For riders at all levels – from the inexperienced leisure rider to the world champion – knowledge about the gaits is necessary for the rider's development, but also in communication with other riders to be able to understand and respect the different qualities and challenges of horses and the correlation and the transitions between the gaits.

By having at least, a basic knowledge and understanding of the gaits, you will be able to ride and enjoy the qualities of the Icelandic horse – and ensure the horse's well-being as a riding horse.

*Jens Iversen,*  
FEIF-president



# The Icelandic Horse

The Icelandic horse is a descendent of horses that were brought to Iceland during the settlement in the period of 874-930. The history of the horse has been an integral part of Icelandic history since then. Through the centuries, the horse was the primary means of transportation along with travelling on foot, as there were practically no roads in the country until the beginning of the 20<sup>th</sup> century and it bridged the otherwise impassable rivers. The Icelandic horse was used primarily for riding and as a pack horse and never used extensively as a draught horse. It was an excellent workhorse, and as such of essential importance in the provision of food, both on the farm and on the shore. The Icelandic horse has therefore occupied a special place in Icelandic culture from the time of the settlement to this day.

Since the horse was so widely used for riding, good riding abilities, vigour and strength were particularly valued. As for the riding abilities, a willing horse with good speed capacity, length of stride and suppleness would have been highly appreciated, as these are desirable attributes for daylong travelling. This explains some expressions that have been used for the gait tölt, such as “yndisspor” (delight gait) or “hýruspor” (merry gait). Moreover, the gaitedness of the Icelandic horse has been preserved through the centuries, and therefore it as the ability for five gaits today.

With the mechanisation of farming and the introduction of automobiles along with the building of drivable roads in Iceland in the 1930s, many feared that the horse would have no purpose for the future. This, however, was not the case. With an increase in leisure activities, the superb riding abilities of the Icelandic horse facilitated the development of a new tradition of leisure riding, sport competitions and travelling on horseback. Today, the Icelandic horse is held in high esteem both as a leisure horse and a competition horse, and it plays a significant role in the lives of thousands of people all over the world. The Icelandic horse is truly one of the most treasured possessions of the Icelandic nation and one of its most valuable assets.

## The gaits of the Icelandic horse

The Icelandic horse is a versatile riding horse that is used for leisure riding, travelling and in various competitions. The versatility of the Icelandic horse consists of, among other things, its five gaits. Its basic gaits are walk, trot, and gallop. In addition, it is capable of tölt as well as pace. In riding and breeding the Icelandic horse, a heavy emphasis is put on the gaits, of which tölt and pace are considered the most desirable, although the versatility of the horse is highly valued as well. The emphasis on the gaits is clearly reflected in the various competitions for the Icelandic horse, which are almost exclusively gait competitions. In addition, the Icelandic horse is a riding horse used both for short distance leisure riding as well as for travelling on longer journeys. Therefore, the quality of its gaits is of crucial importance.

The main goal in regards to the gaits is to keep them pure and clearly distinguished. A pure gait has a correct beat, the horse moving freely without constraint or mistakes in an even rhythm. The gaits should moreover possess long, roomy strides and lightness and the movements of the horse should be high and supple. In an old Icelandic regulation on riding horses it is stated that: “The movements of the riding horse should be light, supple, high, with good suspension and clear-beated, regular and free”. This definition is still valid.



In this booklet, the gaits of the Icelandic horse are defined. These are basic definitions describing the beat, footfall sequence and movements in each stride. Ideal movements pertaining to each gait will be described, as well as deviations from the correct beat. The basic terms used to describe gaits of horses will be described in the beginning.

## Terms used to describe gaits

Horses and other quadrupeds can choose among many gaits. In their natural habitat horses switch between gaits depending on the speed they are travelling at, choosing the most energy efficient gait for each respective speed range. A gait is the coordination of all four legs through a single stride. Each gait has its own motion pattern and each motion pattern consists of a sequence of footfalls, a stance phase and a swing phase. *Stance phase* is the duration when the leg is in contact with the ground and *swing phase* is the phase when the leg is not in contact with the ground. It is called overlap when more than one hoof touches the ground simultaneously. In this case, a distinction is made between bipedal support, tripedal support and quadrupedal support. It is called unipedal support when only one hoof touches the ground without the support of another hoof.

The cycle between e.g. the moment the right hind leg hits the ground until it hits the ground again is called a *stride* and *stride duration* is the time this takes.

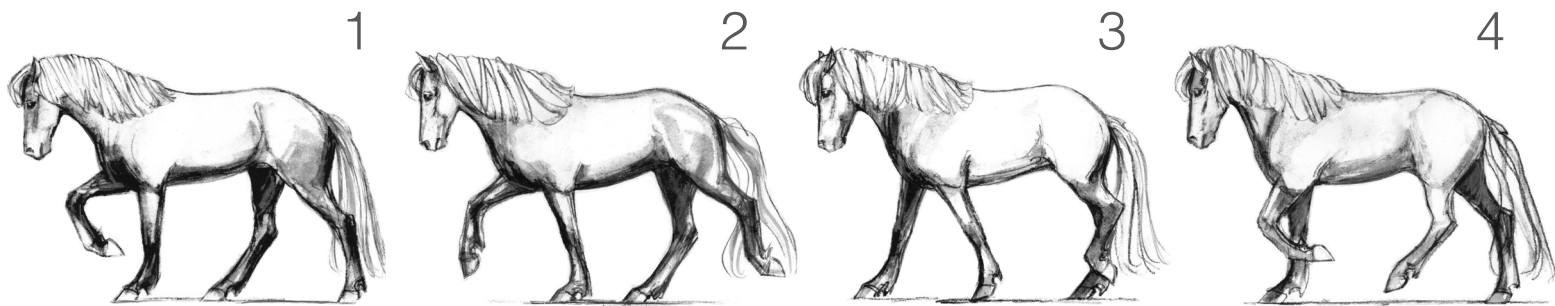
Gaits may be divided into two general categories: *symmetrical* and *asymmetrical*. In asymmetrical gaits, the motion of the legs on the left side of the horse is quite different from that of the right side. This applies to canter and gallop. In symmetrical gaits the legs on one side of the horse mirror the motion of those on the other. This applies to walk, trot, pace and tölt. In symmetrical gaits the movement trajectory of the left front leg is identical to the movement trajectory of the right front leg and the movement trajectory of the left hind leg is identical to the movement trajectory of the right hind leg.

Gaits are furthermore divided into *walking (stepping)* and *running* gaits based on whether there is a moment of suspension in the stride or not. In the case of walking gaits there is always at least one hoof touching the ground and there is not a single swing phase during the stride. Running gaits have one or more swing phases during each stride, when not a single hoof touches the ground. Actually, tölt is defined as a running gait, even though it lacks a swing phase, but this is because during each stride there comes a moment when both front legs are in the air and a moment when both hind legs are in the air. This, however, does not take place simultaneously during the stride and therefore it is called a half-suspension.

In describing symmetrical gaits, the lateral advanced placement (LAP), i.e. the time passing between ground contacts of lateral legs, is measured. This variable is defined as proportion of stride duration. In pace LAP is practically 0, since the lateral legs hit the ground almost simultaneously, but for pure beat trot the LAP is 1/2. In pure tölt and walk, which are four-beat gaits, the LAP should be 1/4. If the value is lower than 1/4 the gait is more like pace and the lateral connection is increased. If the value is higher than 1/4 the gait is more like trot and the diagonal connection between limbs is increased.

# Walk

The walk is used considerably in training and riding. The qualities of the walk are evaluated in various competitions and at breeding assessments for Icelandic breeding horses.



Walk is a four beat stepping gait with a ipsilateral movement. Walk has eight phases during the walk stride. The limb sequence is: left hind leg, left foreleg, right hind leg and right foreleg and the support phases alternate between bipedal and tripedal support. Ideally it should have a regular rhythm with even time interval between ground contacts of each limb.

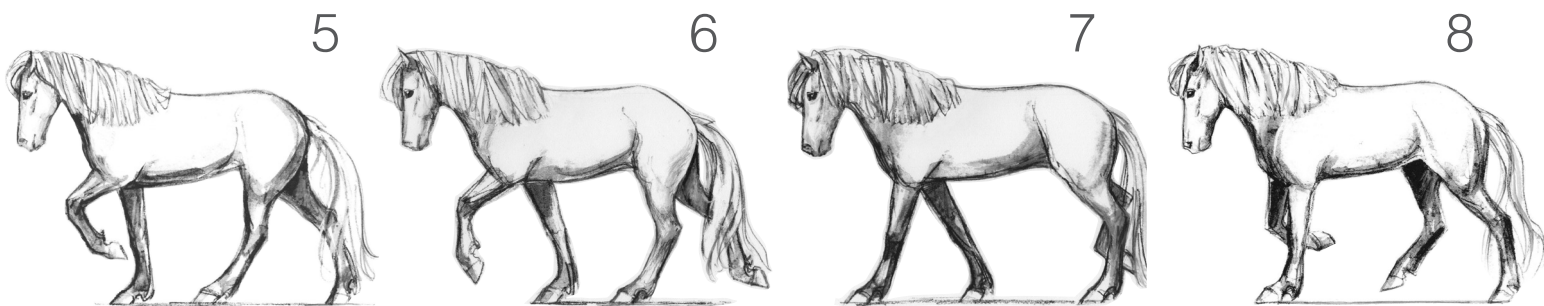
## Description

The walk is a symmetrical, four beat stepping gait with an ipsilateral movement. Ideally it should have a regular rhythm with even time interval between ground contacts of each limb (that is, a forelimb lands about 1/4 of stride duration after the ipsilateral hind limb). The limb sequence is: left hind leg, left foreleg, right hind leg and right foreleg. It is a gait without suspension and has eight phases during the walk stride and the support phases alternate between bipedal and tripedal support (see image).

## Ideal movements in walk

The horse should be supple and move briskly in an even and correct beat with long strides. The head and neck should move rhythmically up and down in balancing gestures and the horse's spinal column is springy and without tension. The horse is active in the hind legs and back, body movements are obvious and the tail swings freely with each stride.





## Faults in walk

### Pacey walk

It is considered undesirable when the walk is pacey; when lateral limbs move forward almost simultaneously and the time interval between ground contacts of lateral legs is too short. Then the walk is said to have a lateral couplet, which is when the time interval between ground contacts of ipsilateral limbs is shorter than  $\frac{1}{4}$  of the stride duration.

### Trotty walk

It is also undesirable if the time interval between ground contacts of diagonal limbs is too short in walk. In this case the walk has lost the purity of the four-beat and the walk is too close to trot. Then the walk is said to have a diagonal couplet, that is, when the time interval between ground contacts of lateral limbs is longer than  $\frac{1}{4}$ .

### Stiff walk

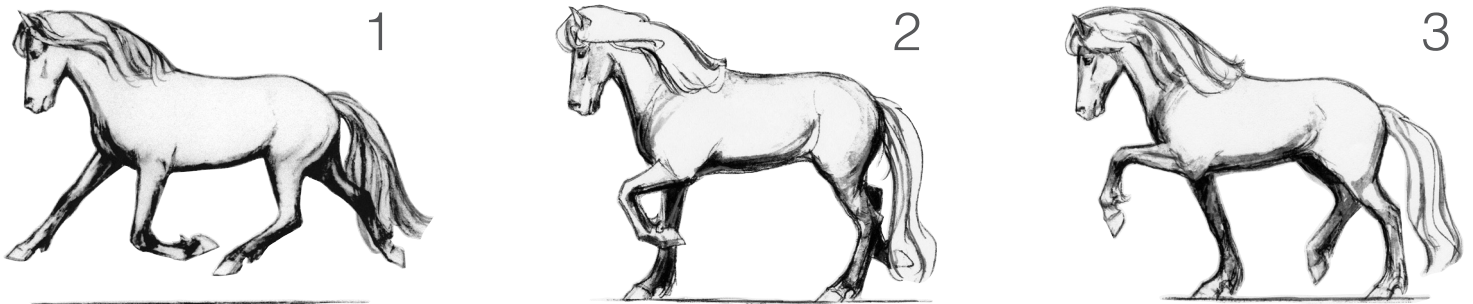
The rhythm is a pure four-beat rhythm but the horse's body lacks suppleness. The back is inactive and stiff and the movements are not flowing through the body of the horse.

### Rushed walk

It is a fault if the horse is not resting in each step and the walk is rushed.

# Trot

Trot is one of the basic gaits of the Icelandic horse and is used systematically in the training of the horse, as well as in leisure riding. Trot is presented in different competitions, including trot racing and it is one of the traits of riding ability that are evaluated at breeding assessments. Trot is ridden at various speeds and in different forms.



Trot is a two-beat, diagonal gait with a moment of suspension. Trot includes four phases. The horse moves the left hind leg and the right front leg (the right diagonal pair) together and the right hind leg and left front leg (the left diagonal pair) together. The diagonal support phases are separated by swing phases.

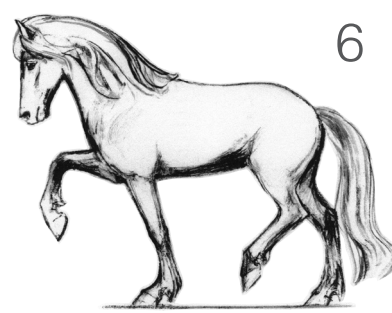
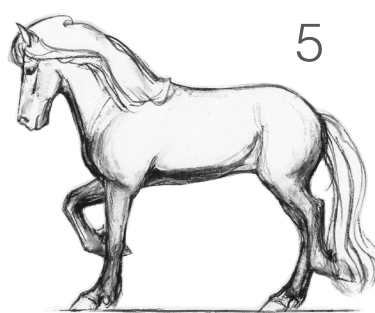
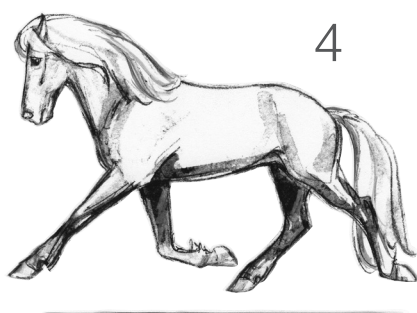
## Description

Trot is a symmetrical two-beat, diagonal gait with a moment of suspension. Trot includes four phases: The horse moves the left hind leg and the right front leg (the right diagonal pair) together and the right hind leg and left front leg (the left diagonal pair) together. The diagonal support phases are separated by swing phases. Trot is the only diagonal gait (see image).

## Ideal movements in trot

In trot the horse should have an arched neck and a rounded, relaxed topline. The horse should go forward with suppleness, impulsion, in even rhythm and with obvious suspension. Trot should possess roomy strides and be a pure two-beat gait. The back is elastic and the movement runs through the horse's body. Trot is ridden at various speeds and in different forms. An example is collected trot, where the neck is more raised and the hindquarters more engaged. This shifts the balance more backwards and the movements of the front quarters become lighter. During fast trot the over line of the horse becomes more extended; head and neck become extended. When trot is ridden at high speed diagonal legs can become dissociated and the forelimb then hits the ground slightly before the diagonal hind limb. Trot at high speed is still considered a two-beat gait since the divergence from synchronous movements of diagonal legs is not noticeable.





## Faults in trot

### Four-beat trot

The most common fault with trot is a four-beat trot. Then diagonal legs become dissociated. This can happen in two ways; the fore limb of the diagonal pair hits and leaves the ground before the hind limb. Then the hind limb of the diagonal pair can hit and leave the ground before the fore limb.

### Loss of suspension in trot

Trot is also considered faulty when it has a pure beat, but lacks a moment of suspension. In this case the horse maintains a pure two-beat rhythm, but hardly leaves the ground. This results in decreased swing phase and the horse becomes earthbound.

### Lack of trunk movements in trot

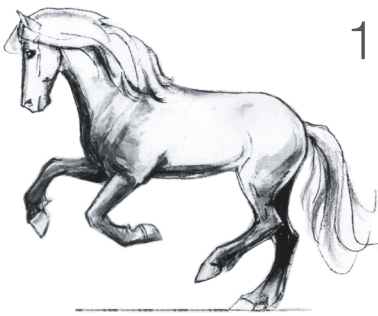
It is considered a fault if trunk movements are lacking during trot. Then action is lacking in the horse's back and the movement does not run through the horse's trunk like it should. The horse is a leg mover but not a body mover.

### Irregular beat in trot

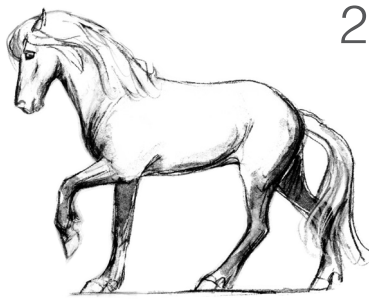
It is also considered a fault if the trot has an irregular beat. The trot can be three-beated, i.e. one diagonal pair of limbs is dissociated but the other is not or, for instance, more or less mixed with canter. The movements of the left and right sides of the horse are not symmetrical and the trot does not possess a pure two-beat rhythm.

# Canter

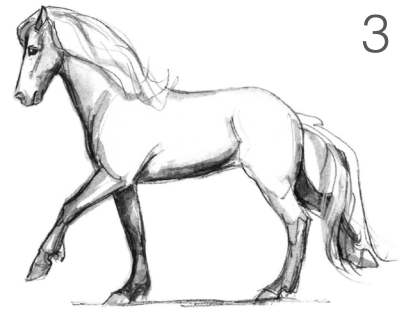
Canter is one of the basic gaits and it is used in systematic training, as well as in leisure riding. Canter is a part of competitions of the Icelandic horse and is evaluated at breeding assessments. The main difference between canter and gallop, apart from speed difference, is that canter is a three-beat gait and gallop is a four-beat gait. When the horse increases the speed in canter, it turns into a four-beat gait at some point because the horse can no longer land synchronously on diagonal legs. A distinction is made between right and left lead canter.



1



2



3

Canter is a three-beat gait with suspension. Canter has six phases. The footfall sequence in left lead canter is: right hind leg – left hind leg: right front leg – left front leg – suspension. As is shown on the images the horse lands first on the right hind leg; then it lands simultaneously on left hind and right front leg (diagonal legs hitting the ground simultaneously) and last on the left front leg followed by a moment of suspension. During canter the support phases alternate between uni-, bi- and tripodal support in a single stride.

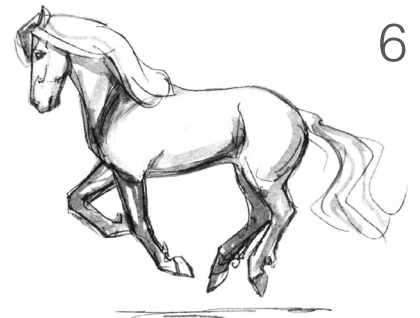
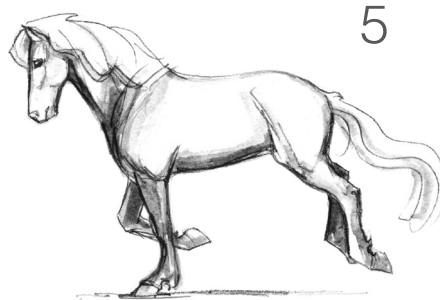
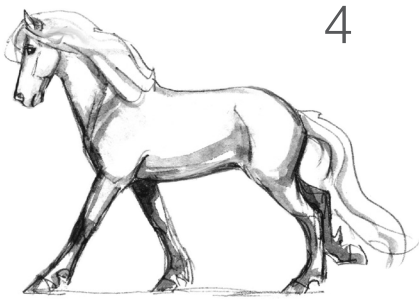
## Description

Canter is an asymmetrical, three-beat gait with suspension. Canter has six phases, the footfall sequence being in right lead canter: left hind - right hind: left front - right front leg- suspension. The horse lands first on the left hind leg; then it lands simultaneously on right hind and left front leg (diagonal legs hitting the ground simultaneously) and last on the right front leg. The horse ends the stride with a moment of suspension after it has landed on the right front leg. The footfall sequence in left lead canter is: right hind leg - left hind leg: right front leg - left front leg - suspension. During canter the support phases alternate between uni-, bi- and tripodal support in a single stride (see image).

## Ideal movements in canter

A good canter has balance and light supple movements. The horse should have an arched neck and rounded relaxed topline and engaged hindquarters. The balance of the horse is shifted backwards, the canter being more collected than the gallop. The movements of the front quarters are light and unconstrained. The horse has a clearly visible suspension and a pure three-beat rhythm.





## Faults with canter/gallop

### Four-beat canter

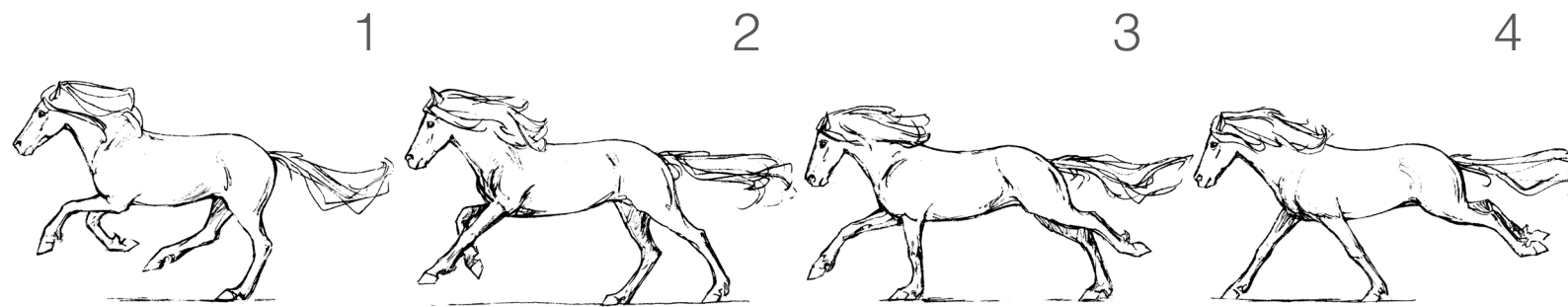
The canter is faulty if it is four-beat. Then there is a dissociation between the diagonal limb pair, with ground contact of the hind leg being in advance of the diagonal foreleg.

### Pacey canter

The canter is faulty when it has a four-beat rhythm and the front leg of the diagonal pair lands before the hind leg. This is called a pacey or lateral canter. When this is the case, the horse is on the forehand and the lateral legs: the left fore and hind legs and the right fore and hind legs, move almost together in a lateral movement.

# Gallop

Gallop is one of the basic gaits and used in systematic training and leisure riding of the Icelandic horse. Gallop is a part of competitions for the Icelandic horse, including gallop racing and is evaluated at breeding assessments. A distinction is made between right and left lead gallop; this will be explained below. For many horses, gallop is the fastest gait.



Gallop is a four-beat gait with a moment of suspension. Footfall sequence during right lead gallop is: left hind leg – right hind leg – left front leg – right front leg – suspension. As is shown on the images the horse lands first on the left hind leg; then it lands on right hind leg and then on the left front leg and last on the right front leg followed by a moment of suspension. During gallop support phases alternate between uni-, bi- and tripodal support in a single stride.

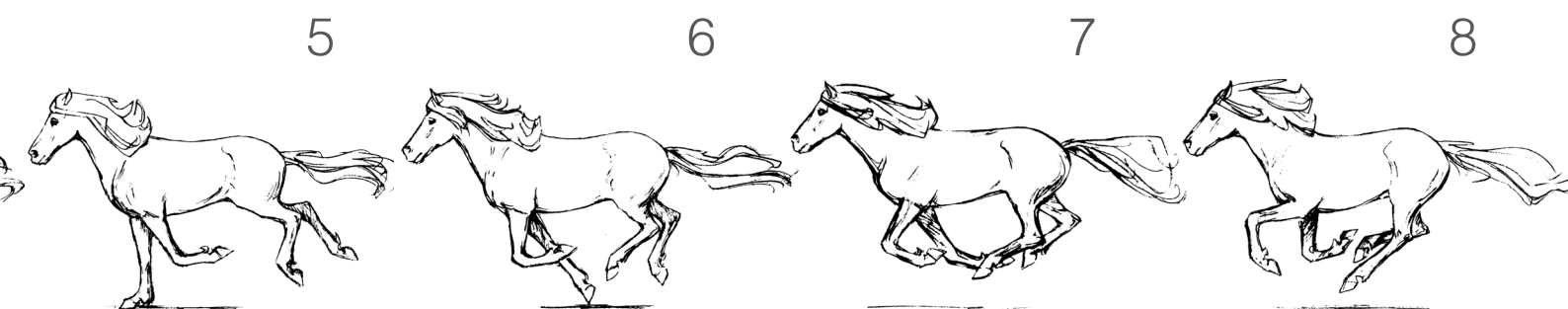
## Description

Gallop is an asymmetrical, four-beat gait with a moment of suspension. Footfall sequence during right lead gallop is: left hind leg – right hind leg – left front leg – right front leg – suspension. The difference between canter and gallop is that during gallop the horse does not hit the ground simultaneously with diagonal legs, but first with the hind leg of the diagonal pair and then with the front leg. The footfall sequence during left lead gallop is: right hind leg – left hind leg – right front leg – left front leg – suspension. Support phases in gallop alternate between uni-, bi- and tripodal support in a single stride (see image).

## Ideal movements in gallop

Gallop is an extended gait where the horse lengthens its strides, covering more ground. The horse springs smoothly with engagement and flexion of the loins. The horse lifts the front quarters well off the ground and stretches in a flowing movement, showing good suspension.





## Faults with canter/gallop

### Lack of trunk movements in canter / gallop

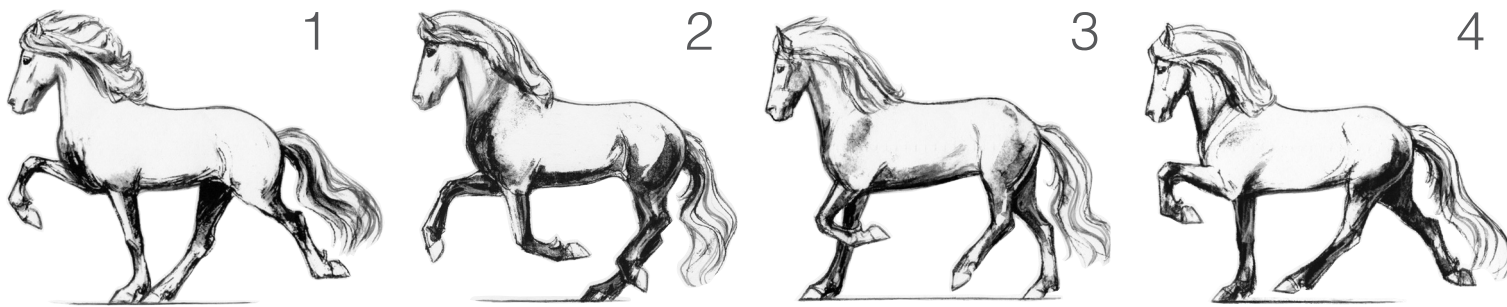
It is considered a fault if trunk movements are lacking in canter or gallop. Then action is lacking in the horse's back and the movement does not run through the horse's trunk like it should. The horse is a leg mover but not a body mover. This can happen when the horse is not uphill; the hindquarters are higher than the front part of the horse and suspension is obvious in the hind. The movements of the horse are stiff and the horse is on the front part.

### Disunited canter / disunited gallop

It is called disunited canter or disunited gallop (also cross-canter/cross-gallop) when the footfall sequence is different from correct canter/gallop, and if this happens during competition or a breeding judgement the horse will not receive a mark for canter/gallop. The horse mixes right and left canter/gallop. The horse may have disunited canter on the left or the right lead. In the case of a left lead disunited canter/gallop the horse lands first on the left hind leg, then on right hind leg and right front leg and then on left front leg. In the case of right lead cross-canter/gallop the horse lands first on the right hind leg, then on left hind leg and left front leg and then on right front leg.

# Tölt

Quality tölt characterizes above other things a good, Icelandic riding horse. Tölt is the most popular gait for general leisure riding, but it is also widely used in competitions. Tölt is evaluated at breeding assessments, where it has the highest value of all traits. Tölt can be ridden both in slow tempo and up to fast tempo.



The tölt is a four-beat gait with ipsilateral sequence of footfalls and eight phases. The footfall sequence is left hind leg – left foreleg – right hind leg – right foreleg. Ideally it should have a regular rhythm with even time interval between ground contacts of each limb. It is a gait without suspension. However, it has half-suspension, both in front (a moment where both front legs are in the air) and hind (a moment where both hind legs are in the air). The support phases during the tölt stride alternate between bipedal and unipedal support.

## Description

Tölt is a symmetrical four-beat gait with ipsilateral sequence of footfalls and eight phases. The footfall sequence is left hind leg - left foreleg - right hind leg - right foreleg. Ideally it should have a regular rhythm with an even time interval between ground contacts of each limb, at any speed (that is, a forelimb lands 1/4 of stride duration after the ipsilateral hind limb). It is a gait without suspension. However, it has half-suspension, both in front and hind and is therefore considered a running gait. The support phases during the tölt stride alternate between bipedal and unipedal support (see image). Tölt is ridden at various speeds.

## Ideal movements in tölt

True tölt is characterized by suppleness and fluid movements. The horse should move in balance, with a strong and active back, and active hind quarters. The movements of the front part are light and free. The horse's rhythm is a pure four-beat rhythm, which runs fluidly through the horse.

## Slow tölt

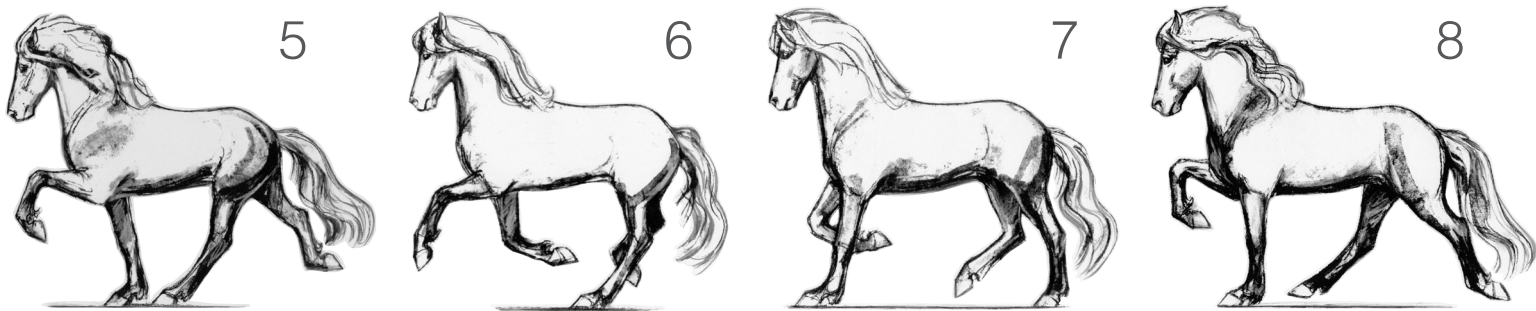
The neck should be arched and the back active and rounded in slow tölt, the whole topline being without tension. The hindquarters are well engaged and the balance is shifted backwards. In slow tölt, the stance phase of the hind legs is longer than the stance phase of the



front legs. At a very slow tölt, the half-suspension may disappear at the hind; then the horse supports itself on one front leg and simultaneously on both hind legs (tripedal support). In this case tölt is ridden more slowly than competition and breeding judgment requirements say and the gait is considered an interphase between walk and tölt.

## Fast tölt

The horse should lengthen its strides in fast tölt and the head and neck can become more extended than at slow tölt, the whole topline still being strong and without tension. The stance phase of front and hind legs becomes more even than at a slow tölt and diagonal bipedal support decreases.



## Faults in tölt

### Pacey tölt

It is considered a fault if the time interval between ground contact of lateral limbs is too short in tölt. Then the correct four-beat rhythm is lost and the tölt resembles pace too much. This is called pacey tölt. Then the tölt is said to have a lateral couplet, which is when the time interval between ground contacts of ipsilateral legs is shorter than  $\frac{1}{4}$  of the stride duration.

### Trotty tölt

During tölt it is also undesirable if the interval between ground contacts of diagonal legs is too short. In this case the tölt has lost the purity of the four-beat and the tölt is too close to trot. Then the tölt is said to have a diagonal couplet, that is, when the time interval between ground contacts of lateral feet is longer than  $\frac{1}{4}$ .

### Stiff tölt

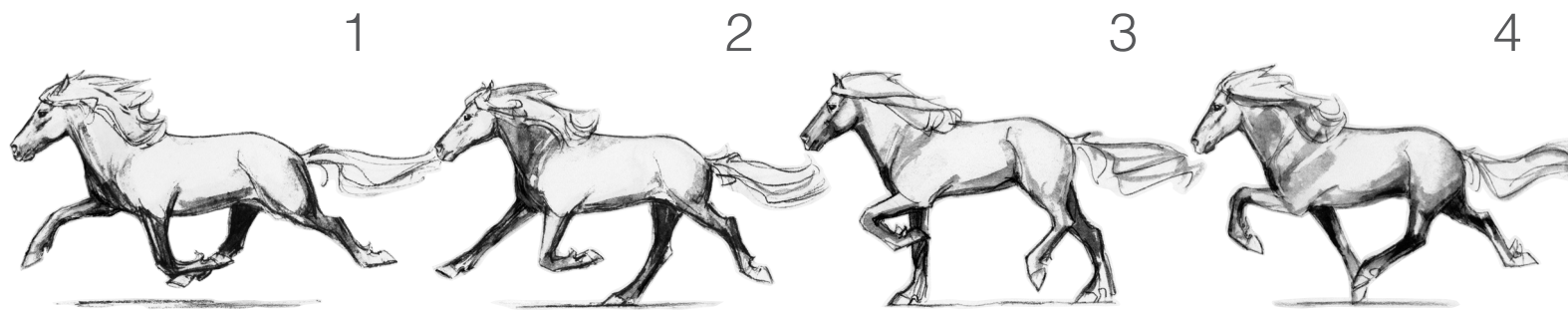
The rhythm can be a pure four-beat rhythm but the horse's body lacks suppleness. The back is inactive and stiff and the movements are not flowing through the body of the horse.

### Irregular beat

It is a fault if the tölt has an irregular beat and it is more or less mixed with canter for instance. The movements of the left and right sides of the horse are not symmetrical and the time interval between ground contacts of each four legs is not even.

# Pace

The pace is one of the hallmarks of the versatile Icelandic horse. The pace is ridden at short distances and ideally at fast tempo. Pace racing is the oldest Icelandic horse sport, where the horse must pace a distance of 100 - 200 metres. Pace is also shown at special pace tests and it is a part of the competition in A-class tournaments and in five-gait. In a breeding judgment, 150 meters are considered a full-length sprint. Pace is also ridden outside of competitions, for fun at short distances. Slow pace is called 'piggy-pace' and is not considered preferable.



Pace is a two-beat gait with a moment of suspension, where ipsilateral legs move almost synchronously back and forth. The footfall sequence is left hind – left front – suspension – right hind – right front – suspension. It is one of the front legs that propel the horse into suspension before the diagonal hind leg lands. At high speed in pace the footfalls of the ipsilateral limbs become dissociated with contact of the hind limb preceding the front limb on the same side. Pace is still considered a two-beat gait since the divergence from synchronous movements of ipsilateral legs is not noticeable.

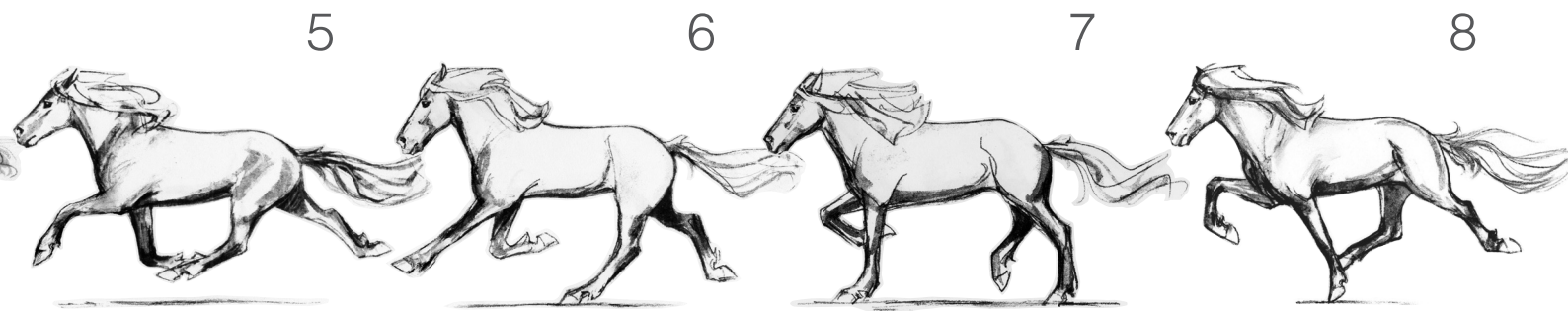
Flying pace is a very fast pace, the word 'flying' both referring to the horse's suspension and its speed during the pace. It is a tradition to ride the pace in a transition from canter or gallop. This way the horse has a better possibility to extend its head and neck and pace in a pure rhythm.

## Description

Pace is a symmetrical, two-beat gait with a moment of suspension, where lateral legs move almost synchronously back and forth. The footfall sequence is left hind leg - left front leg - suspension - right hind leg - right front leg – suspension. It is one of the front legs that propel the horse into suspension before the diagonal hind leg lands. At high speed in pace the footfalls of the lateral limbs become dissociated with contact of the hind limb preceding the front limb on the same side. Pace is still considered a two-beat gait since the divergence from synchronous movements of lateral legs is not noticeable (see image).

## Ideal movements in pace

Pace is an energetic gait ridden at high speed, where the horse lengthens its strides. During pace the horse should lift its back and extend the head and neck forward. In the suspension-phase, lateral front and hind legs are stretched far forward and the opposite legs are stretched far backward. Pace is considered pure if the moment of suspension is clearly visible and the divergence from synchronous movements of lateral legs is not noticeable.



## Faults in pace

### Four-beat pace

The so-called four-beat pace is undesirable. Pace is four-beat if the dissociation of lateral limbs becomes visible and time interval between ground contacts of lateral limbs becomes too long. With increased four-beat rhythm the horse's suspension-phase becomes shorter.

### Stiff pace

It is also undesirable if pace is stiff, with too much lateral movement and the horse is unable to proceed fast enough. If the horse's centre of gravity moves too much forwards the front leg hits the ground before the ipsilateral hind leg and the horse switches to disunited canter. This change of gaits is referred to as "jumping out of gait".

### Irregular pace

It is a fault if the pace has an irregular beat and the horse is repeatedly losing its balance and jumping into gallop and then taking the pace again. This is often associated with a neck-carriage that is too high, too much four-beat in the pace and the horse taking a few strides of gallop in between.

Editorial committee:  
Þorvaldur Kristjánsson  
Gunnar Reynisson  
Sigurbjörn Bárðarson  
Sigurður Ævarsson

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Gísli B. and Næst  
Drawings: Pétur Behrens  
Coloured drawings: Ulrich Neddens

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